

On page 6, line 24, before "cubic", insert --nearly--.

On page 7, line 3, delete "evaporation" and substitute therefor
--deposition--.

On page 7, line 13, delete "heat" and substitute therefor --thermal--.

On page 7, line 17, delete "metal" and substitute therefor --an insulator--.

On page 7, line 18, delete "an insulator" and substitute therefor --metal--.

On page 8, line 2, before "to", delete "μm" and substitute therefor --micro
meter--.

On page 8, line 2, after "to 2.5", delete "μm" and substitute therefor
--micro meter--.

On page 8, line 2, delete "absorbance" and substitute therefor

--absorptivity--.

On page 8, line 4, delete "absorbance is increased to" and substitute
therefor --high absorptivity decreases net heat rejection capability--.

On page 8, line 5, delete "obstruct heat radiation".

On page 8, line 14, delete "heat" and substitute therefor --thermal--.

In the claims:

Please amend the claims as originally filed as follows:

Sub A
Sub B

1 Claim 1 (Amended). In a thermal [heat] control device, a variable-phase
2 substance exhibiting a property of an insulator [or a property of metal] in a
3 high temperature phase and a property of metal in [or] a low temperature
4 phase, [respectively,] and radiating a great amount of heat in a high
5 temperature phase and [or] a small amount of heat in the low temperature
6 phase [or the high temperature phase, respectively,] controls a temperature
7 of an object.

1 Claim 2 (Amended). A thermal [heat] control device as claimed in claim 1,
2 wherein said variable-phase substance comprises a [an oxide of] perovskite
3 Mn oxide.

sub-a4

1 Claim 3 (Amended). A thermal [heat] control device as claimed in claim 2,
2 wherein the [oxide of] perovskite Mn oxide comprises an oxide of Mn-
3 containing perovskite represented by $A_{1-x}B_xMnO_3$ where A is at least one
4 of La, Pr, Nd and Sm rare earth ions, and B is at least one of Ca, Sr and Ba
5 alkaline rare earth ions.

sub B2

1 Claim 4 (Amended). A thermal [heat] control device as claimed in claim 3,
2 wherein said variable-phase substance is affixed to the object by powder
3 coating, deposition [evaporation], crystalline adhesion or adhesion of a
4 film formed of a variable-phase substance containing a binder.

1 Claim 5 (Amended). A thermal [heat] control device as claimed in claim 4,
2 further comprising either one of a plate and a film mounted on said phase-
3 variable substance for transmitting infrared rays and reflecting visible rays.

1 Claim 6 (Amended). A thermal [heat] control device as claimed in claim 5,
2 wherein the object comprises either one of an artificial satellite and [a]
3 spacecraft.

1 Claim 7 (Amended). A thermal [heat] control device as claimed in claim 1,
2 wherein the [oxide of] perovskite Mn oxide comprises an oxide of Mn-
3 containing perovskite represented by $A_{1-x}B_xMnO_3$ where A is at least of
4 La, Pr, Nd and Sm rare earth ions, and B is at least one of Ca, Sr, and Ba
5 alkaline rare earth ions.

1 Claim 8 (Amended). A thermal [heat] control device as claimed in claim 7,
2 wherein said variable-phase substance is affixed to the object by powder
3 coating, deposition [evaporation], crystalline adhesion or adhesion of a
4 film formed of a variable-phase substance containing a binder.

Sub A 4

1 Claim 9 (Amended). A thermal [heat] control device as claimed in claim 8,
2 further comprising either one of a plate and a film mounted on said phase-
3 variable substance for transmitting infrared rays and reflecting visible rays.

B

1 Claim 10 (Amended). A thermal [heat] control device as claimed in claim
2 9, wherein the object comprises either one of an artificial satellite and [a]
3 spacecraft.

Sub B 3

1 Claim 11 (Amended). A thermal [heat] control device as claimed in claim
2 1, wherein said variable-phase substance comprises an oxide of Cr-
3 containing corundum vanadium.

1 Claim 12 (Amended). A thermal [heat] control device as claimed in claim
2 11, wherein said variable-phase substance comprises $(V_{1-x}Cr_x)_2O_3$..

1 Claim 13 (Amended). A thermal [heat] control device as claimed in claim
2 12, wherein said variable-phase substance is affixed to the object by
3 powder coating, deposition [evaporation], crystalline adhesion or adhesion
4 of a film formed of a variable-phase substance containing a binder.

1 Claim 14 (Amended). A thermal [heat] control device as claimed in claim
2 13, further comprising either one of a plate and a film mounted on said
3 phase-variable substance for transmitting infrared rays and reflecting
4 visible rays.

1 Claim 15 (Amended). A thermal [heat] control device as claimed in claim
2 14, wherein the object comprises either one of an artificial satellite and [a]
3 spacecraft.

Sub B 4

1 Claim 16 (Amended). A thermal [heat] control device as claimed in claim
2 1, wherein said variable-phase substance comprises $(V_{1-x}Cr_x)_2O_3$.

Sub 64

1 Claim 17 (Amended). A thermal [heat] control device as claimed in claim
2 16, wherein said variable-phase substance is affixed to the object by
3 powder coating, deposition [evaporation], crystalline adhesion or adhesion
4 of a film formed of a variable-phase substance containing a binder.

B7

1 Claim 18 (Amended). A thermal [heat] control device as claimed in claim
2 17, further comprising either one of a plate and a film mounted on said
3 phase-variable substance for transmitting infrared rays and reflecting
4 visible rays.

1 Claim 19 (Amended). A thermal [heat] control device as claimed in claim
2 18, wherein the object comprises either one of an artificial satellite and [a]
3 spacecraft.

1 Claim 20 (Amended). A thermal [heat] control device as claimed in claim
2 1, wherein said variable-phase substance is affixed to the object by powder
3 coating, deposition [evaporation], crystalline adhesion or adhesion of a
4 film formed of a variable-phase substance containing a binder.

1 Claim 21 (Amended). A thermal [heat] control device as claimed in claim
2 20, further comprising either one of a plate and a film mounted on said
3 phase-variable substance for transmitting infrared rays and reflecting
4 visible rays.

1 Claim 22 (Amended). A thermal [heat] control device as claimed in claim
2 21, wherein the object comprises either one of an artificial satellite and [a]
3 spacecraft.

1 Claim 23 (Amended). A thermal [heat] control device as claimed in claim
2 1, further comprising either one of a plate and a film mounted on said
3 phase-variable substance for transmitting infrared rays and reflecting

Sub-A4

4 visible rays.

1 Claim 24 (Amended). A thermal [heat] control device as claimed in claim
2 23, wherein the object comprises either one of an artificial satellite and [a]
3 spacecraft.

1 Claim 25 (Amended). A thermal [heat] control device as claimed in claim
2 1 [23], wherein the object comprises either one of an artificial satellite and
3 [a] spacecraft.

1 Claim 26 (Amended). In a method of controlling a temperature of an
2 object, a variable-phase substance exhibiting a property of an insulator [or
3 a property of metal] in a high temperature phase and a property of metal in
4 [or] a low temperature phase, [respectively,] and radiating a great amount
5 of heat in the high temperature phase and [or] a small amount of heat in the
6 low temperature phase [or the high temperature phase, respectively], is
7 affixed to said object.

1 Claim 27 (Amended). A method as claimed in claim 26, wherein the object
2 comprises either one of an artificial satellite and [a] spacecraft.

1 Claim 28 (Amended). A method as claimed in claim 26, wherein said
2 variable-phase substance comprises either one of a [an oxide of] perovskite
3 Mn oxide and an oxide of Cr-containing corundum vanadium.

1 ~~Claim 29 (Amended). A method as claimed in claim 28, wherein the object~~
2 ~~comprises either one of an artificial satellite and [a] spacecraft.~~

In the Abstract: